

**YANGON UNIVERSITY OF ECONOMICS
DEPARTMENT OF STATISTICS
POST GRADUATE DIPLOMA IN RESEARCH STUDIES**

**A STUDY ON STRATEGIES FOR VOCABULARY ACQUISITION
AMONG FIRST YEAR STUDENTS IN YANGON UNIVERSITY OF
ECONOMICS (YWA THA GYI CAMPUS)**

JUNE 2023

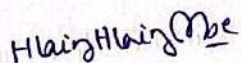
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This research paper is submitted to the Board of Examination as partial fulfillment of the
requirement for the Postgraduate Diploma in Research Studies

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ABSTRACT

Vocabulary is crucial in learning a foreign language as it forms the foundation for developing speaking, listening, reading, and writing skills. To effectively communicate in a foreign language, learners must acquire an adequate number of words and understand their accurate usage. This research aims to explore the highest and lowest frequently used of vocabulary learning strategies used by first year students at Yangon University of Economics (Ywa Tha Gyi). Systematic sampling was used and one hundred students were participated in the study. Vocabulary Learning Strategies were measured with 15 items. The mean score of Vocabulary Learning Strategies shows that the most frequent strategy used for vocabulary learning is using a bilingual dictionary (3.91), the least frequent strategy used for vocabulary learning is memorizing words from English magazines (2.46). According to the Pearson's correlation analysis, there is a positive relationship between year of studying English and Vocabulary Learning Strategies. Regarding to the results of multiple regression analysis, gender and years of studying English influence on Vocabulary Learning Strategies. It is found that female students mostly used Vocabulary Learning Strategies than male students.

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CHAPTER I

INTRODUCTION

In this chapter, background of the study, reasons of the study, purposes of the study, scope of the study and organization of the study will be studied.

1.1 Rationale of the Study

To communicate with each other in English very well, vocabulary functions as a cornerstone. Without a well-functioning mental lexicon, communication will break down. Knowing more vocabularies means variety of vocabulary types to be learned, including single words, phrases, collocations, and strategic vocabulary as well as grammatical patterning, idioms, and fixed expressions.

According to Richards (1976) and Nation (2001), it is not enough for learners to know just one meaning for a word. Learners need to know different aspects of a word like: spoken and written forms, words parts (prefix, suffix and 'root' form), grammatical forms, collocations, associations (words that are similar or opposite in meaning), connotations and frequency.

In learning a foreign language, vocabulary plays an important role. It is one of the fundamental elements in learning four skills: speaking, listening, reading and writing. In order to communicate well in a foreign language, learners should acquire an adequate number of words and should know how to use them accurately. Even though learners realize the importance of vocabulary when learning language, most Myanmar learners of English learn vocabulary passively due to several factors. First, they learn vocabulary for meaning or definition, pronunciation, spelling and grammatical functions. Second, they only think of vocabulary learning as knowing the primary meaning of a new word. Therefore, they ignore all other aspects of the words such as collocation, connotation and contextual meaning. Third, students usually only acquire new vocabulary through new words in their textbooks or when given by teachers during the lessons. For example, learners find many new words in a text and then ask the teacher to explain the meanings and their use. Fourth, many Myanmar learners do not want to use the vocabulary that they have learnt. Students may recognize a word in a written or spoken form and think that they already "know the word", but they may not be able to use that word properly in different

contexts or pronounce it correctly. To solve the problems mentioned above, using interactive activities in teaching vocabulary in the classroom may be effective for learners.

1.2 Objectives of the Study

This main objective of the study is to investigate the vocabulary learning strategies of first year students from Yangon University of Economics (Ywa Tha Gyi).

The specific objectives are:

- (i) To overview the socio-demographic characteristics of first year students
- (ii) To observe the highest and lowest frequently used of vocabulary learning strategies of first year students.
- (iii) To examine the factors which are influenced on vocabulary learning strategies

1.3 Method of Study

In this study, primary data were used. One hundred were selected by using descriptive statistics and systematic sampling methods. The descriptive statistics are used to describe the socio-demographic characteristics of the respondents and the vocabulary learning strategies. The vocabulary learning strategies were measured by 5 points Likert Scale including 15 items in the questionnaire. Multiple regression analysis is used to analyze the influencing factors of vocabulary learning strategies of the respondents.

1.4 Scope and Limitations of the Study

This study especially focuses on students from Yangon University of Economics (Ywa Tha Gyi). The data were collected from these students based on their vocabulary learning strategies. Although there are eight majors at the University, only four majors such as commerce, accounting, public administration and development studies were studied.

1.5 Organization of the Study

This study consists of five main chapters. Chapter I is the introduction, which describes rationale of the study, research objectives, scope and limitation of the study, method and organization of the study. Chapter II is about the literature review concerning the main topics. Chapter III gives information about the research methodology applied in

this study. Chapter IV expressed the main findings and gives results based on that survey data. Chapter V, the last chapter of the study, discussed summary of findings, limitations of the study, implication and suggestions for further research.

CHAPTER II

LITERATURE REVIEW

In this chapter, what is vocabulary, teaching vocabulary, different aspects of vocabulary, factors to be considered in teaching vocabulary, how to teach students remember, techniques in vocabulary teaching, learning vocabulary, how words are remembered, incidental and direct vocabulary learning, types of learners and different learning styles

2.1 What is Vocabulary?

Vocabulary can be defined, roughly, as "the words the teachers teach in the foreign language". However, a new item of vocabulary may be more than just a single word: for example, *post office*, and *mother-in-law*, which are made up of two or three words but express a single idea. A useful convention is to cover all such cases by talking about vocabulary items rather than words.

All languages consist of words. Historically, languages emerge first as words when first and any subsequent languages are learnt. Vocabulary is still widening because the learners are continually learning new words and the meanings of old words, even in their native language. For example, the usage of the post office or letters was popular but nowadays emails are used. Some words can be entirely new to them. The learners come across completely new words that are made up according to new technologies and according to the needs of real life. For example, a verb "to google" is used frequently a lot. Learners of a foreign language experience something similar. Thornbury (1988) states that words that are totally unfamiliar or being used in ways that are novel and possibly obscure can be observed. To find the right word to fit the meaning can be very frustrating, especially if the store of words is limited.

2.2 Teaching Vocabulary

Teaching vocabulary is an important area worthy of effort and investigation because it needed for expressing meaning and in using the receptive (listening and reading) and the productive (speaking and writing) skills. "If language structures make up the

skeleton of language, then it is vocabulary that provides the vital organs and the flesh" (Harmer; 1993).

Although vocabulary is not a syllabus, it is a list of words that teachers prepare for their learners to memorize or learn by heart. Memorizing may be good and useful as a temporary technique for tests, but not for learning a foreign language. Language learners need to learn the vocabulary of the target language in another way. If the teacher really wants to teach students what words mean and how they are used, he needs to show them together with context. Words do not just exist on their own; they live together and they depend upon each other. Therefore, teaching vocabulary correctly is a very important element in language learning. Correct vocabulary instruction involves vocabulary section, word knowledge and techniques.

Teaching vocabulary is not just conveying the meaning to the students and asking them to learn those words by heart. Teachers should use different techniques and activities in teaching English vocabulary to motivate the learners, enrich their vocabulary and enable them to speak English.

2.2.1 Different Aspects of Vocabulary

According to Harmer (1993), learners need to know the form of the word, its meaning, grammar, verb form, word formation, when to use, connotation, contextual meaning and collocation. Therefore, learners need to know the form of the word and one or more of its meanings. Besides knowing the form of the word, learners also need to be familiar with its grammar. Learners need to know e.g., irregular forms of verbs or plural nouns, the position of adjectives etc. Another aspect in teaching vocabulary is the word formation. Learners should know how to change a word form and when to use it (gerund, the past form).

Teaching the meaning includes mainly connecting a word with its equivalent in the real world. It is called denotation. Apart from denotation, connotation of the word (associations and feelings, which arise when the word is heard) should be taught. Many vocabulary items have several meanings depending on context. Word meaning is frequently stretched through the use of metaphor and idiom. Furthermore, learners need to be provided with the sense relations to other words. There are various relationships such

as synonyms, antonyms, hyponyms etc.

Another challenge the learner will face when learning a new item is collocation. That means he or she needs to know which words can be used in connection with each other and how. For example, when learning the word "picture", the learner should be informed that one can *take* a picture, not *make* a picture. Thus, students need to acquire the ability to recognize when it is appropriate to use a particular word - speaking or writing, informal conversation with a friend or formal polite conversation.

It is not enough for learners to learn just the form and its denotation of a new vocabulary item. In order to be able to understand properly and to use a new item of vocabulary in a given language correctly, the learner must be familiar with the word connotation, grammar and formation as well as its collocation and the right way and appropriateness of use.

2.2.2 Factors to be Considered in Teaching Vocabulary

Every language teacher must make a choice with a great difficulty on what and how much vocabulary to teach depending on the level and age of the students. Furthermore, they must consider what vocabulary items to teach first (during early stages of the course) and what vocabulary to leave for later on. The teacher's choice of vocabulary is influenced into some extent by the course book and supplementary materials they use. However, the teacher decides on emphasis given to individual items.

When making a decision about what vocabulary to teach preferentially, the teacher should take into consideration mainly the usefulness of the words and interests of the learners. Moreover, the facts those to be taken into consideration are the learner's needs frequency, coverage, range and learnability.

In the first place, the teacher should consider the learner's needs. Allen (1983) points out that it is useful to provide the learner with words for 'classroom language' just at the early stages of the course. She continues to say that it is important for the teacher to predict what words the student needs to know for talking about everyday life, people and things surrounding them. "When such words are learnt, the new language can immediately be put to use".

One of the criteria affecting the choice of the teacher is the frequency in which the

particular item is used in common language. In general, the words which are most commonly used are the ones the teacher should teach first. However, most frequent words do not usually convey much information but to be able to communicate, learners need to know a considerable number of words bearing some meaning that are ambiguous (McCarthy, 1992).

Another aspect to consider is coverage. Harmer (1993) states that the words covering more things are likely to be taught before words with only one specific meaning. For example, the word 'book' will be taught before words 'notebook or exercise book'.

McCarthy (1992) also speculates on the range of an item. It is generally advisable to avoid the vocabulary with a restricted range, since the wider range an item has, the more useful it is likely to be. Generally, concrete things are more learnable than abstract ones, therefore they are always taught first.

"Learnability" is another factor influencing the order in which chosen vocabulary will be taught. There are a lot of reasons why words might be easy or difficult to learn. If the spelling, pronunciation or meaning of a word is difficult to remember, the students will not learn it easily.

2.2.3 How to Teach Students Remember

In learning vocabulary, it is important for the learners to store pertinent information in long-term memory and then to be able to get access to those memories in many different situations. Creating accessible memories take time. Teaching for memory will be successful if the teacher is clear about what her students need to remember. To make the learning exciting, productive, and memorable for the learners, the teacher needs to do the following steps. Firstly; the teacher who is teaching for memory must determine what needs to be measured. Then, the teacher must create the assessment and must give students a clear target. This teacher must attempt to plan learning experiences and instruction that will be able to use in the real world. Later, the teacher has created a brain-compatible classroom. Moreover, even though memorization may play some role in what is taught, the teacher needs to think about conceptual understanding whenever she creates an effective lesson plan for vocabulary teaching.

2.2.4 Techniques in Vocabulary Teaching

According to Harmer (1993), learners acquire vocabulary in various ways. Students are exposed to a lot of new vocabulary during lessons: by the teacher, by texts or other materials they work with. A lot of vocabulary is automatically absorbed. Harmer (1993) also suggests sense relations, definition and direct translation of words might function as another helpful tool for clarifying the meaning.

Beside this incidental acquisition, Thornbury (2004) states that there are "pre-planned lesson stages in which learners are taught pre-selected vocabulary items". Various techniques and activities are aimed directly at learning vocabulary, which is usually put into sets of related words, often by topic or meaning.

As McCarty (1992) suggests, before presenting new language, pre-teaching activities might be beneficial "to activate existing knowledge to make the encounter with new words more meaningful". Pre-teaching activities often arouse students' attention and desire to explore a particular topic or subject in greater detail.

Both McCarthy (1992) and Thornbury (2004) suggest two general possibilities of arranging vocabulary presentation. The teacher provides the learners with the meaning of the words and then progresses to introduction of their forms or vice versa — the form is introduced first, followed up with illustration of the meaning.

In the latter, forms are often presented in text or another form of context and students are encouraged to discover meanings and other properties of words themselves. This type of activity is called the *discovery technique* (Harmer, 1993). There are many possibilities of how to explain or illustrate the meaning of the words. In the first place, it is necessary to mention techniques typical for 'Direct I Method' which Thornbury specifies them "using real objects (called *realia*) or pictures or mime".

The same author continues to say that these means are especially appropriate for teaching elementary levels, where, many concrete objects are taught. These types of presentation are usually supplemented with the -use of TPR (Total physical response), which is a technique where the teacher gives commands and students perform the actions. In TPR, "the intention is to replicate the experience of learning one's mother tongue" (Thornbury 2004).

Thornbury (2004) listed these options as well and furthermore included an idea of

clarifying the meaning such as "providing an example situation" or "giving several example sentences".

All these techniques are more or less useful for a particular situation, level and vocabulary, the best way would be in many cases to combine them and use several together.

Besides explaining the meaning in vocabulary presentation, it is also important to focus on forms, since the sound of words is one of the aspects influencing the organization of the mental lexicon (Thombury 2004; McCarthy, 1992).

This is arranged by various drilling activities. From experience, songs and chants are very suitable for drills, providing rhythm, catchy rhymes and an element of fun. As Thombury (2004) suggests, introducing the written form of the word should follow not long after the presentation of the pronunciation.

After presentation, learners should be provided with plenty of opportunities to practice the newly gained language in accordance with the above-mentioned principles since it is crucial for successful remembering. This is done by various forms of practice activities. In the first stage, usually mechanical practice is applied "in the form of some of kind of oral repetition"(Thombury; 2004). Furthermore, as Thombury (2003) claims, it is necessary to integrate new vocabulary into existing knowledge in the mental lexicon, which is done by types of activities, where students make judgments about words, e.g., matching, comparing etc. This mechanical practice is then followed by more open and communicative activities "where learners are required to incorporate the newly studied words into some kind of speaking or writing activity". This is often provided by various pair-work or group-work activities.

2.3 Learning Vocabulary

2.3.1 How Words are Remembered

Unlike the learning of grammar, which is essentially a rule-based system, vocabulary knowledge is largely a question of accumulating individual items. The general rule seems to be a question of memory. And during the process of teaching and learning vocabulary an important problem occurs: How does memory work? Researchers into the workings of memory distinguish into two types: short- term storage and long- term memory.

Short-term store is the brain capacity to hold a limited number of items of information for periods of time up to a few seconds. It is the kind of memory that is involved in repeating a word that students have just heard the teacher modeling. But successful vocabulary learning involves more than holding words for a few seconds. To integrate words into long - term memory they need to be subjected to different kinds of operations.

Long-term memory can be seen as kind of filing system. Unlike working memory, which has a limited capacity and no permanent content, this kind of memory has an enormous capacity and its contents are durable over time. A number of principles are required to be followed, to ensure moving new materials into permanent long-term memory.

Repetition is useful and effective. If the word is met several times during activities, students have a very good chance to remember it for a long time. Retrieval is another kind of repetition. Activities, which require retrieval, such as using the new items in written tasks, help students to be able to recall it again in the future. In Pacing, students should be ideally given the opportunity to do memory work individually.

Cognitive depth is important for long-term memory because the more decisions students make about the word and the more cognitively demanding these decisions are, the better the word is remembered. Personal organizing is another factor that personalization significantly increased the probability that students will remember new items. It is achieved mainly through conversation and role-playing activities.

Imaging is also important because easily visualized words are better memorable than those that do not evoke with any pictures. Even abstract words can be associated with some mental image. Strong motivation can encourage that words will be remembered. Even unmotivated students remember words if they have to face appropriate tasks. Attention also plays a vital, role because it is not possible to improve vocabulary without a certain degree of conscious attention.

2.3.2 Incidental and Direct Vocabulary Learning

Although researchers are not in complete agreement, it is widely acknowledged that incidental learning is responsible for the majority of L2 vocabulary acquisition after the

first two or three thousand most frequent words are learned (Huckin&Coady, 1999). The term *incidental* refers to the fact that vocabulary acquisition is not the primary pedagogical concern and the vocabulary that is learned is done so as a byproduct of the main activity.

The other type of learning, often credited for the acquisition of the most common words for L2 learners, is usually referred to as *direct* or *intentional* learning. Schmitt (2000) rightly acknowledges that "the learning of basic words cannot be left to chance, but should be taught as quickly as possible, because they open the door to further learning". Nation (2008) agrees that the first 2,000 most frequent words should be taught to learners as an important initial step in instruction. According to Nation (2001), this also includes vocabulary from the Academic Word List (AWL) (Coxhead, 1998, 2000), for those learners planning on continuing with further academic study.

Nation (2001) notes that many researchers investigating first language (L1) vocabulary acquisition, like Nagy (1997), consider direct teaching "a waste of time".

However, leaving something as important as vocabulary acquisition entirely for learners to pick up incidentally through reading or listening activities may be somewhat unsettling for EFL teachers. Nagy (1997) concedes that incidental learning in an L2 is more challenging than in the L1, though he maintains that incidental learning is the only way for L2 learners to develop sufficiently large vocabularies.

In promoting the use of incidental vocabulary learning, one must be careful not to discard direct methods entirely. Sokmen (1997) highlights past research (Haynes, 1993; Coady, 1993) that questions the effectiveness of vocabulary instruction that relies solely on incidental learning and recommends the need for more direct teaching methods to accompany it. Schmitt (2000) also sees the need for both types of learning and advises that they not be considered independently of one another. Direct teaching is an invaluable addition to incidental learning as it, in effect, primes learners by focusing on the same words that they will encounter while reading text, thereby leading to increased opportunities for acquisition (Nation, 2001).

2.4 Types of Learners and Different Learning Styles

2.4.1 Different Types of Learners

By discovering students' learning styles, the teacher can help to improve their learning. Identifying the characteristics of different types of learners helps the teacher prepare and deliver the lessons more effectively. Different learners have different learning styles, i.e., they are visual, auditory or kinesthetic. The following are some pieces of information to help know more and identify different types of learners.

Visual Learners

Visual learners can learn primarily through the written word. They tend to be readers who diligently take down every word.

Auditory Learners

Auditory learners learn primarily through listening. They focus their ears and attention on the teacher's words and listen carefully to everything what he says. And then, they like to talk rather than write and relish the opportunity to discuss what they've heard.

Kinesthetic Learners

Kinesthetic learners learn better by doing. They learn best when they can practice what they are learning. They want to have their hands on the keyboard, the hammer, or the test tube because they think in terms of physical action. After identifying their unique learning styles, the teacher can design the lesson plan building upon it. Understanding learning styles is only a first step in maximizing potential and overcoming learning differences.

2.4.2 Different Learning Style

There are three main types of learning styles. They are auditory, visual, and kinesthetic. Most people learn best through a combination of the three types of learning styles, but everybody is different.

Auditory Learners would rather listen to things being explained. than read about them. Reciting information out loud and having music in the background may be a common study method. Other noises may become a distraction resulting in a need for a relatively quiet place.

Visual Learners learn best by looking at graphics, watching a demonstration, or

reading. For them, it's easy to look at charts and graphs, but they may have difficulty focusing while listening to an explanation.

Kinesthetic Learners process information best through a "hands-on" experience. Actually, doing an activity can be the easiest way for them to learn. Sitting still while studying may be difficult, but writing things down makes it easier to understand.

Although most learners use a combination of the three learning styles, they usually have a clear preference for one. Knowing and understanding the types of learning styles is important for students of any age. It is advantageous for students to understand their type of learning style early on so that homework and learning may become easier and less stressful in the future. Although it may be tempting to stick with what works, it's important to practice and train the other types of learning styles early on so that, as he grows, the child can utilize the other types just as effectively.

CHAPTER III

RESEARCH METHODOLOGY

In this chapter, survey design of the study, Pearson's Product Moment Correlation Coefficient and Multiple Linear Regression Model, and assumptions of the Multiple Linear Regression Model are described. Moreover, test for significance of overall multiple regression model, testing individual Partial Regression Coefficients, and the Coefficient of Multiple Determination (R^2) are also discussed.

3.1 Survey Design

In this research, respondents are first year students from Yangon University of Economics (Ywa Tha Gyi Campus). The study is emphasized on four specializations such as commerce, accounting, public administration and development studies. The population size is 800 students. Twenty-five students from each specialization are selected by systematic sampling. The sample size is 100 students. The survey was conducted through questionnaire and Likert scale was used. The data were collected by systematic sampling method. From the questionnaire, the highest and lowest frequently used of vocabulary learning strategies used by first year students can be observed.

3.2 Pearson's Product Moment Correlation Coefficient

The Pearson's correlation coefficient tells us two aspects of the relationship between two variables. The sign (- or +) for r identifies the kind of relationship between the two quantitative variables, and the magnitude of r describes the strength of relationship.

The mathematical formula for the Pearson's correlation coefficient r is as follows.

$$r = \frac{n \sum X_i Y_i - \sum X_i \sum Y_i}{\sqrt{[n \sum X_i^2 - (\sum X_i)^2][n \sum Y_i^2 - (\sum Y_i)^2]}}$$

where r = correlation coefficient

n = number of observations

$\sum x y$ = sum of the product of x and y

$\sum x^2$ = sum of squares of values of variable x

$(\sum x)^2$ = square of the sum of all the values of variable x

The magnitude of the correlation lies between -1 and 1 this means that $-1 \leq r \leq 1$. The value of correlation coefficient that is close to -1 indicates that the two variables have a strong negative relationship. Negative relationship means that an increase in one variable causes another variable to decrease, and vice versa. On the other hand, a value that is close to 1 indicates that the two variables have a strong positive relationship. Positive relationship means that an increase in one variable will cause the other variable to increase, and vice versa.

3.3 Multiple Linear Regression Model

Linear regression attempts to model the relationship between two variables by fitting a linear equation to observe data. One variable is considered to be an explanatory variable, and the other is considered to be dependent variable. Before attempting to fit a linear model to observe data, a model should first determine whether or not there is a relationship between the variables of interest. The equation can be interpreted as prediction equation if the independent variable precedes the dependent variable. Multiple regression models take the following form;

$$Y_i = \beta_0 + \beta_1 X_{1i} + \beta_2 X_{2i} + \dots + \beta_k X_{ki} + e_i; \quad i=1, 2, \dots, n \quad (3.10)$$

where;

Y_i	= value of the dependent variable in the i^{th} trial
β_0	= constant in the regression equation
β_1, \dots, β_k	= regression coefficients associated with each of the X_k independent variable
X_{ij}	= value of the j^{th} independent variable in the i^{th} trial
e_i	= the random error in the i^{th} trial or observation

3.3.1 Assumptions of the Multiple Linear Regression Model

The following are the assumptions of multiple regression models

(i) Multiple linear regression needs the relationship between the dependent variable and independent variables to be linear. It is also important to check outliers since multiple linear regression is sensitive to outlier effects.

- (ii) The multiple linear regression analysis requires that the error between observed and predicted values (i.e., the residuals of the regression) should be normally distributed.
- (iii) The error of the mean is uncorrelated; that the standard mean error of the dependent variable is independent from the independent variables.
- (iv) The multiple linear regression analysis makes homoscedasticity
- (v) There is no multicollinearity. That is, there is no linear relationship among the independent variables.

3.3.2 Test for Significance of Overall Multiple Regression Model

The F test is used to determine whether there exists a significant relationship between the dependent variable and the entire set of independent variables in the model. The ANOVA procedure tests the null hypothesis that all the β values are zero against the alternative that at least one β is not zero.

$$H_0: \beta_1 = \beta_2 = \beta_3 = \dots = \beta_k = 0$$

$$H_a: \text{At least one } \beta_i \text{ isn't zero.}$$

Table (3.1) provides the format for an ANOV table for multiple regression.

Table (3.1) ANOVA Table

Source of Variation	Sum of Squares	Degree of Freedom (df)	Mean Square	F- value
Between samples (treatment)	SSR	K	$\frac{SSR}{k}$	$F = \frac{MSR}{MSE}$
Within samples (error)	SSE	$n-k-1$	$\frac{SSE}{n-k-1}$	
Total variation	SST	$n-1$		

If the null is not rejected, then there is no linear relationship between Y-variable and any of the independent variables. On the other hands, if the null is rejected then at least one independent variable is linearly related to Y.

3.3.3 Testing Individual Partial Regression Coefficients

The next logical step is to test each coefficient individually to determine which one (or ones) is significant.

$$H_0: \beta_i = 0$$

$$H_a: \beta_i \neq 0$$

The t-test statistic is

$$t = \frac{b_i - 0}{s_{b_i}}$$

where b_i is the individual coefficient being tested

s_{b_i} is the standard error of b_i

If P-value is less than the significant level, null hypothesis is rejected.

3.4 The Coefficient of Multiple Determination (R^2)

The coefficient of determination can be calculated by using the errors sum of squares (SSE) and regression sum of square (SSR), and total sum of square (SST). The coefficient of multiple determinations is defined as;

$$R^2 = \frac{SSR}{SST} = 1 - \frac{SSE}{SST}$$

The R^2 measure the variation in Y that is explained by the independent variable X in the simple linear regression model. In multiple regression, the coefficient of multiple determination represents the proportion of the variation in Y that is explained by the set of independent variables. The value of coefficient of multiple determinations will be between zero and one.

A common practice in multiple regression and correlation analysis to report the adjusted coefficient of determination. Symbolized as \bar{R}^2 , this statistic adjusts the measure of explanatory power for the number of degrees of freedom.

CHAPTER IV

RESULTS AND FINDINGS

This chapter discusses about the socio - demographic characteristics of the respondents and descriptive statistics of vocabulary learning strategies use. In addition, the relationship between demographic characteristics and vocabulary learning strategies use and the multiple regression model for vocabulary learning use.

4.1 Socio - demographic Characteristics of Respondents

In this part, respondents are answered their gender, age, getting vocabulary, and social media usage.

4.1.1 Respondents' Gender

In Table (4.1), respondents are answered their gender status.

Table (4.1) Frequency Distribution of Respondents' Gender

Gender	Frequency	Percent
Male	20	20.0
Female	80	80.0
Total	100	100.0

Data Source: Survey Data (May, 2023)

The data presented shows the distribution of gender among the participants in the study. Out of the total 100 participants, 20 individuals identified as male, representing 20% of the sample. On the other hand, 80 participants identified as female, accounting for 80% of the sample. These percentages provide insights into the gender composition of the participants and indicate that the majority of the participants were female.

4.1.2 Respondents' Age

In Table (4.2), respondents are answered their age.

Table (4.2) Frequency Distribution of Respondents' Age

Age	Frequency	Percent
17	5	5.0
18	51	51.0
19	24	24.0
20	16	16.0
21	4	4.0
Total	100	100.0

Data Source: Survey Data (May, 2023)

The data provided represents the distribution of ages among the participants in the study. It can be seen that 5 participants (5%) reported an age of 17 years, 51 participants (51%) reported an age of 18 years, 24 participants (24%) reported an age of 19 years, 16 participants (16%) reported an age of 20 years and 4 participants (4 %) reported an age of 21 years.

These percentages indicate the proportion of participants within each age group. It is evident that the majority of participants fell into the 18-year-old, comprising 51% of the sample. The age composition of the participants is essential to consider when interpreting the research findings, as different age groups may exhibit varying characteristics, perspectives, and responses.

4.1.3 Respondents' Years of Studying English

In Table (4.3), respondents are answered their years of studying English.

Table (4.3) Frequency Distribution of Years of Studying English Among Respondents

Years of Studying English	Frequency	Percent
Below 5 years	48	48.0
5 years and above	52	52.0
Total	100	100.0

Data Source: Survey Data (May, 2023)

The data provided represents the distribution of the number of years participants have been studying English. It is found that 48% of respondents are studying English below 5 years while 52% of respondents are studying English during the 5 and above.

The distribution of years of studying provides insights into the participants' level of experience and dedication to learning the foreign language. It is important to consider these different levels of experience when interpreting the research findings, as participants with varying years of studying may display different language proficiency levels, understanding, and learning strategies.

4.1.4 Ways of Getting their Vocabulary

In table (4.4), respondents are answered their ways of getting vocabulary.

Table (4.4) Frequency distribution of “Ways of Getting their Vocabulary”

Ways of Getting their Vocabulary	Frequency	Percent
Smart Phone	95	95.0
Tablet	1	1.0
Laptop	4	4.0
Total	100	100.0

Data Source: Survey Data (May, 2023)

The data provided represents the distribution of tools used for enhancing vocabulary among the participants. The following tools were reported: 95 participants (95%) reported using a Smart Phone for enhancing vocabulary. 1 participant (1%) reported using a Tablet for enhancing vocabulary. 4 participants (4%) reported using a laptop for enhancing vocabulary. The percentages indicate the proportion of participants who reported using each tool.

The data highlights the prevalence of using Smart Phones as the primary tool for enhancing vocabulary among the participants, with 95% of participants using this device.

This information suggests that Smart Phones are the preferred choice among the participants for accessing vocabulary-enhancing resources, likely due to their portability, convenience, and availability of mobile applications specifically designed for language learning. Considering the dominant use of Smart Phones, it would be essential to ensure the compatibility and optimization of vocabulary-enhancing tools for mobile platforms, as they are the most widely used device in this context.

Tablets were reported by only 1% of participants, while 4% of participants reported using Laptops. The limited use of Tablets and Laptops may be attributed to their less frequent usage or the participants' preference for the versatility of Smart Phones.

4.1.5 Social Media Usage

In Table (4.5), respondents are answered their social media usage.

Table (4.5) Frequency Distribution of "Social Media Usage"

Social Media Usage	Frequency	Percent
Facebook	94	94.0
Instagram	2	2.0
TikTok	1	1.0
Other	3	3.0
Total	100	100.0

Data Source: Survey Data (May, 2023)

The data provided represents the distribution of social media platforms used by the participants. The following social media platforms were reported:

94 participants (94%) reported using Facebook, the data reveals that Facebook is the most widely used social media platform among the participants. 2 participants (2%) reported using Instagram, 1 participant (1%) reported using TikTok and 3 participants (3%) reported using other social media platforms. Instagram and TikTok are used by only a small percentage of participants, with 2% and 1% respectively. Additionally, 3% of participants reported using other social media platforms.

The dominant use of Facebook suggests its popularity and prevalence as a social media platform among the participants. This information can be useful in considering the potential integration of vocabulary-enhancing activities or resources on Facebook to cater to the preferences and habits of the participants. It is also worth noting that a small portion of participants engage with other social media platforms, indicating a diversity of preferences in social media usage.

4.2 Descriptive Statistics of Vocabulary Learning Strategies

Table (4.6) represents descriptive statistics of vocabulary learning strategies use among students.

Table (4.6): Descriptive Statistics of the Respondents' Vocabulary Learning Strategies

Vocabulary Learning Strategies Use Items	Mean	Std. Deviation
I use bilingual dictionary to help me translate English words into Myanmar.	3.91	0.905
I use picture illustrated in the textbook to find the word meanings.	2.77	0.993
I learn meaning of the words by identifying its part of speech.	3.48	1.068
I ask the teacher to translate the words into Myanmar	2.71	1.047
I ask the teacher to put an unknown word into a sentence to help me understand the word meaning.	2.67	1.129
I ask my classmates for meaning.	3.51	1.159
I write a new word in sentences so I can remember it.	3.41	1.190
I study a spelling of new words.	3.84	0.972
I repeatedly practice new words.	3.57	1.103
I learn vocabulary from English sound track and movies.	3.82	1.104
When I try to remember a word, I write or say it repeatedly.	3.53	1.176
I watch English channels and news to improve my vocabulary.	3.20	1.054
I memorize word from English magazines.	2.46	1.077
I am not worry very much about the difficult words found when reading or listening, I pass them.	3.05	0.947
I use online exercises to test my vocabulary knowledge.	3.69	0.961

The descriptive statistics reveals the average ratings and the variability in participants' responses regarding different vocabulary enhancement strategies. According to the participants reported the highest mean for using a bilingual dictionary (3.91), students are often used this strategy. On the other hand, using picture illustrations in textbooks (2.77) and asking the teacher to translate words (2.71) received lower mean ratings, it is found that students are sometimes used these strategies. According to the strategies of asking classmates for meaning (3.51), writing new words in sentences (3.41), studying spelling (3.84), repeatedly practicing (3.57), learning from English soundtracks and movies (3.82), and writing/saying words repeatedly (3.53), it can be seemed that students frequently use this strategy. Watching English channels and news (3.20) and using online exercises (3.69) also revealed that students mostly use these ways also.

Memorizing words from English magazines (2.46) and not worrying about difficult words (3.05) had lower mean ratings. Overall, the standard deviations for these strategies indicate variability in participants' opinions, suggesting differences in preferences and experiences among the participants.

4.3 Multiple Regression Analysis of Vocabulary Learning Strategies

In the study, dependent variable is vocabulary learning strategies and independent variables are gender, age, years of studying English, getting vocabulary and social media usage. Gender, getting vocabulary and social media usage are qualitative variables. Gender is classified as male and female. Getting vocabulary is classified as smart phone and tablet/ laptop and social media usage is classified as Facebook and Instagram/ Snapchat/ Tiktok. This study examined that gender, age, years of studying English, getting vocabulary and social media usage are related to vocabulary learning strategies. The results of multiple regression analysis for vocabulary learning strategies described in Table (4.7).

Table (4.7) Results of Multiple Linear Regression Model of Vocabulary Learning Strategies

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	2.118**	.931		2.276	.025
Gender (Male, Female)	.658***	.106	.445	6.184	.000
Age	.017	.047	.027	.369	.713
Years of Studying English (Below 5 years = 0, 5 years and above = 1)	.073***	.010	.585	7.661	.000
Smartphone	-.111	.130	-.063	-.858	.393
Facebook	.091	.181	.037	.504	.615
R	0.725				
R ²	0.525				
Adjusted R ²	0.500				
F (P-value)	20.82*** (P-value=0.000)				

** and *** denote coefficient is significant at the 0.05 and 0.01 level

According to multiple regression model, the R^2 value and adjusted R^2 are 0.525 and 0.5, respectively. The value of adjusted R^2 (0.5) represents as 50% of the variation in the vocabulary learning strategies was explained by gender, age, years of studying English, getting vocabulary, and social media usage.

Regarding the results of multiple regression analysis, this model is significant at 1% level. It can be seen that there is a relationship between gender, age, years of studying English, getting vocabulary, and social media usage and vocabulary learning strategies. The coefficient of female is significant at 1% level and its value is 0.658. It can be seen that female students are more learning vocabulary than male students. The coefficient of years of studying English is significant at 1% level and its value is 0.073. It can be seen that an increases in student's years of studying English will lead to an increase in the vocabulary learning strategies.

CHAPTER V

CONCLUSION

In this chapter, findings, suggestions and recommendations are discussed.

5.1 Findings

The aim of the research is to explore the highest and lowest frequently used of vocabulary learning strategies used by first year students at Yangon University of Economics (Ywa Tha Gyi). Systematic sampling was used and one hundred students were observed as participants in the study. Vocabulary Learning Strategies were measured with 15 items by a questionnaire.

The analysis of the socio-demographic characteristics of the respondents provides valuable insights into the composition of the study. The majority of participants identified as female (80%), indicating a gender imbalance in the study. In terms of age, participants predominantly fell into the 18-year-old category (51%). The distribution of years of studying revealed varying levels of experience, with a significant portion of participants (38%) reporting studying for three years. The data also highlighted the prevalent use of smartphones (95%) as the primary tool for enhancing vocabulary among the participants. In terms of social media usage, Facebook was the most widely used platform (94%), followed by Instagram (2%) and TikTok (1%). These demographic characteristics provide essential contextual information for interpreting the research findings and considering potential variations based on age, gender, experience, and regional differences.

The descriptive statistics of the attitudinal statements revealed participants' average ratings and the variability in their responses regarding different vocabulary enhancement strategies. The highest mean rating was observed for using a bilingual dictionary (3.91), indicating students most frequently used that approach. On the other hand, strategies such as using picture illustrations in textbooks (2.77) and asking the teacher to translate words (2.71) received lower mean ratings, indicating students are learnt frequently used these approaches.

Regarding the strategies such as asking classmates for meaning (3.51), writing new words in sentences (3.41), studying spelling (3.84), repeatedly practicing (3.57), learning from English soundtracks and movies (3.82), and writing/saying words repeatedly (3.53),

students are frequently used strategies involving watching English channels and news (3.20) and using online exercises (3.69) also received moderately use these strategies.

However, memorizing words from English magazines (2.46) had lower mean ratings. The standard deviations indicated variability in participants' opinions, suggesting differences in preferences and experiences.

According to the correlation analysis results, vocabulary learning strategies and gender are a moderately positive relationship at 1% significance level. In addition, vocabulary learning strategies and years of studying English are moderately positive relationship at 1% significance level and vocabulary learning strategies and getting vocabulary are low negative relationship at 1% significance level.

Regarding the results of multiple regression analysis, this model is significant at 1% level. It can be seen that there is a relationship between gender, age, years of studying English, getting vocabulary, and social media usage and vocabulary learning strategies. The coefficient of gender is significant at 1% level and its value is 0.658. It can be seen that female students are more learning vocabulary than male students. The coefficient of years of studying English is significant at 1% level and its value is 0.073. It can be seen that an increases in student's years of studying English will lead to an increase in the vocabulary learning strategies.

5.2 Suggestions and Recommendations

The followings are the recommendations for future researcher.

Gender Balance: Considering the gender imbalance in the study, future research should strive for a more balanced representation of male and female participants to ensure a comprehensive understanding of the research topic.

Age Consideration: Given the diverse age groups of the participants, it would be beneficial to analyze the research findings by age categories to explore potential variations in attitudes, learning strategies, and language proficiency levels among different age groups.

Mobile Optimization: Considering the prevalence of smartphone usage among participants for enhancing vocabulary, developers of vocabulary-enhancing tools should

ensure the compatibility and optimization of their applications for mobile platforms. This will enable participants to access resources conveniently and make the most of their preferred learning device.

Integration of social media: Given the popularity of Facebook among participants, researchers and educators could explore the integration of vocabulary-enhancing activities or resources on Facebook. Leveraging the platform's wide usage can help engage participants and create interactive language learning environments.

Further Exploration of Low-rated Strategies: Strategies that received lower mean ratings, such as using picture illustrations and relying solely on teacher translations, warrant further investigation. Research could delve into participants' reasons for lower agreement and explore potential improvements or alternative approaches to enhance vocabulary learning in these areas.

Tailored Instruction: Recognizing the variability in participants' opinions and preferences, educators and language instructors should consider offering a variety of vocabulary enhancement strategies to cater to individual learning styles and preferences. This tailored approach can optimize participants' learning strategies.

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APPENDIX 1

Questionnaire of Vocabulary Learning Strategies

Part I: General Information

1. Name : _____
2. Gender : male ☐ female ☐
3. Age : _____
4. How long have you been studying English?
_____ years
5. How can you get your vocabulary?
☐ Smartphone
☐ Tablet
☐ Laptop
6. Social media usage:
☐ facebook ☐ Instagram ☐ Snapchat ☐ Tiktok
☐ twitter ☐ wechat ☐ other apps
7. States & Regions:
☐ Kachin
☐ Kayah
☐ Kayin
☐ Chin
☐ Mon
☐ Rakhine
☐ Shan
☐ Yangon Division
☐ Mandalay Division
☐ Magway Division
☐ Sagaing Division
☐ Bago Division
☐ Ayeyarwaddy Division

- ☐ Tanintharyi Division
- ☐ Naypyitaw

Part II: Statements of Vocabulary Learning Strategies

The questionnaire presented with checklist columns in rating. The scale of questionnaire indicated the frequency of each strategy.

1 = Never

2 = Rarely

3 = Sometimes

4 = Often

5 = Always

Put () in the box which most describes your opinion on the strategies you use to learn English.

No.	The statement of Vocabulary learning strategies	1	2	3	4	5
1.	I use bilingual dictionary to help me translate English words into Myanmar.					
2.	I use picture illustrated in the textbook to find the word meanings.					
3.	I learn meaning of the words by identifying its part of speech.					
4.	I ask the teacher to translate the words into Myanmar					
5.	I ask the teacher to put an unknown word into a sentence to help me understand the word meaning.					
6.	I ask my classmates for meaning.					

7.	I write a new word in sentences so I can remember it.					
8.	I study a spelling of new words.					
9.	I repeatedly practice new words.					
10.	I learn vocabulary from English sound track and movies.					
11.	When I try to remember a word, I write or say it repeatedly.					
12.	I watch English channels and news to improve my vocabulary.					
13.	I memorize word from English magazines.					
14.	I am not worry very much about the difficult words found when reading or listening, I pass them.					
15.	I use online exercises to test my vocabulary knowledge.					